Shared 'Dublin' descriptors for the Bachelor's, Master's and Doctoral awards

A report from a Joint Quality Initiative informal group (contributors to the document are provided in the Annex).

23 March 2004

1 INTRODUCTION

This note proposes a shared 'Dublin' descriptor for the doctoral award. The descriptor extends the existing Dublin descriptors for Bachelor's and Master's awards that have been published previously through the Joint Quality Initiative.

In keeping with the Dublin Descriptors for the Bachelor's and Master's awards, the doctoral descriptor is a general statement of the expected attributes of a doctoral student that is independent of the precise nature of the educational process. The descriptor draws upon other sources some of which are associated with national frameworks of qualifications including:

Quality Assurance Agency Framework for higher education qualifications ii

Scottish Credit and Qualifications Frameworkiii

Irish National Framework of Qualificationsiv

Danish Qualifications Framework^v

The note also considers the sequence of three Dublin Descriptors that relate to completion of the first, second and third Bologna cycles and indicates the progression steps between the cycles.

2 BACKGROUND

2.1 The Berlin Communiqué

In September 2003 the Berlin Communiqué 2003 added a third cycle to the Bologna process to include doctor education and promote links between the European Research Area and the European Higher Education Area.

Moreover, in relation to qualifications frameworks the Communiqué mentions:

Ministers encourage the member States to elaborate a framework of comparable and compatible qualifications for their higher education systems, which should seek to describe qualifications in terms of workload, level, learning outcomes, competences and profile. They also undertake to elaborate an overarching framework of qualifications for the European Higher Education Area.

Within such frameworks, degrees should have different defined outcomes. First and second cycle degrees should have different orientations and various profiles in order to accommodate a diversity of individual, academic and labour market needs. First cycle degrees should give access, in the sense of the Lisbon Recognition Convention, to second cycle programmes. Second cycle degrees should give access to doctoral studies.

2.2 On formulating a doctoral descriptor

The various types of doctorate in use across Europe include three broad types: the doctorate that is predominantly research based (often awarded PhD), the professional doctorate, and the so-called 'higher doctorates'.

The professional or practitioner doctorate is a relatively new and still evolving practice in European higher education. Many professional doctorates in UK, where they are well established in some fields such as Psychology, require that the candidate completes a substantial piece of original research that is comparable "in standard if not in scale" vi to a supervised PhD.

The 'Higher doctorates', that are available for example in Ireland, the United Kingdom and Denmark, require attributes that are different in character from those required for PhDs or professional doctorates.

Following discussion the JQI group consider that a shared Doctoral descriptor should encompass the outcomes of research-based and professional doctorates, but that it should not refer to particular forms of study.

3 DUBLIN DESCRIPTORS FOR BACHELOR'S, MASTER'S AND DOCTORAL AWARDS

3.1 'Dublin' Descriptors

The JQI Dublin descriptors for Bachelors and Masters were first proposed in March 2002 (see: www.jointquality.org). It is proposed that for a better understanding of the 'Dublin descriptors' in the context of the Berlin communiqué and their possible future usage, alternative headings, as indicated below, may be more appropriate:

Bachelor's degrees are awarded to students who:

alternative

Qualifications that signify completion of the first cycle are awarded to students who:

have demonstrated knowledge and understanding in a field of study that builds upon and supersedes their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;

can apply their knowledge and understanding in a manner that indicates a professional¹ approach to their work or vocation, and have competences² typically demonstrated through devising and sustaining arguments and solving problems within their field of study;

have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues;

can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;

have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.

Master's degrees are awarded to students who:

alternative

Qualifications that signify completion of the second cycle are awarded to students who:

have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with Bachelor's level, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research³ context;

can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;

have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements;

can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;

have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.

Doctoral degrees are awarded to students who:

alternative

Qualifications that signify completion of the third cycle are awarded to students who:

have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;

have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;

have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;

are capable of critical analysis, evaluation and synthesis of new and complex ideas;

can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;

can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society;

Glossary

- 1. The word 'professional' is used in the descriptors in its broadest sense, relating to those attributes relevant to undertaking work or a vocation and that involves the application of some aspects of advanced learning. It is not used with regard to those specific requirements relating to regulated professions. The latter may be identified with the profile / specification.
- 2. The word 'competence' is used in the descriptors in its broadest sense, allowing for gradation of abilities or skills. It is not used in the narrower sense identified solely on the basis of a 'yes/no' assessment.
- 3. The word 'research' is used to cover a wide variety of activities, with the context often related to a field of study; the term is used here to represent a careful study or investigation based on a systematic understanding and critical awareness of knowledge. The word is used in an inclusive way to accommodate the range of activities that support original and innovative work in the whole range of academic, professional and technological fields, including the humanities, and traditional, performing, and other creative arts. It is not used in any limited or restricted sense, or relating solely to a traditional 'scientific method'.

Differentiating between cycles

| Cycle | Knowledge and understanding: | |
|---------------|--|--|
| 1 (Bachelor) | [is] supported by advanced text books [with] some aspects informed by knowledge at the forefront of their field of study | |
| 2 (Master) | provides a basis or opportunity for originality in developing or applying ide often in a research* context | |
| 3 (Doctorate) | [includes] a systematic understanding of their field of study and mastery of the methods of research* associated with that field | |

| | Applying knowledge and understanding: | | |
|---------------|---|--|--|
| 1 (Bachelor) | [through] devising and sustaining arguments | | |
| 2 (Master) | [through] problem solving abilities [applied] in new or unfamiliar environments within broader (or multidisciplinary) contexts | | |
| 3 (Doctorate) | [is demonstrated by the] ability to conceive, design, implement and adapt a substantial process of research* with scholarly integrity | | |
| | [is in the context of] a contribution that extends the frontier of knowledge by developing a substantial body of work some of which merits national or international refereed publication | | |

| | Making judgements: | |
|---------------|--|--|
| 1 (Bachelor) | [involves] gathering and interpreting relevant data | |
| 2 (Master) | [demonstrates] the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete data | |
| 3 (Doctorate) | [requires being] capable of critical analysis, evaluation and synthesis of new and complex ideas | |

| | Communication | |
|---------------|---|--|
| 1 (Bachelor) | [of] information, ideas, problems and solutions | |
| 2 (Master) | [of] their conclusions and the underpinning knowledge and rationale (restricted scope) to specialist and non-specialist audiences (monologue) | |
| 3 (Doctorate) | with their peers, the larger scholarly community and with society in general (dialogue) about their areas of expertise (broad scope) | |

| | Learning skills | |
|---------------|--|--|
| 1 (Bachelor) | have developed those skills needed to study further with a high level of autonomy | |
| 2 (Master) | study in a manner that may be largely self-directed or autonomous | |
| 3 (Doctorate) | expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement | |

Annex 1List of Contributors to the Dublin Meeting on the Doctorate

| Name | Organisation | <u>e-mail</u> |
|-----------------------------------|--|---|
| Mrs. Tone Flood Strom | Ministry Ed & Res | tfs@ufd.dep.no |
| Tim Nordin | Min Ed & Science | tim.nordin@education.ministry.se |
| Prof. Dr. Wolfgang Maennig | g FIBAA - Univ. Hamburg | Wmaennig@t-online.de kran@fibaa.de |
| Prof. Terence Mitchell | Akkreditierungsrat - Univ Dortmund | terence.mitchell@uni-dortmund.de |
| Dipl. Phys.Wolfgang Koerner | Niedersachsischen Min. Wissenschaft und Kultur | wolfgang.koerner@mwk.niedersachs en.de |
| Hermann Reuke | ZEvA | reuke@zeva.uni-hannover.de |
| Dr Rolf Heusser | OAQ | rolf.heusser@oaq.ch sabine.dombrowski@oaq.ch |
| Annick Weizmann | OAQ | annick.weizmann@oaq.ch |
| Renee Westenbrink | VSNU | westenbrink@vsnu.nl |
| Marlies Leegwater | Ministry of Education, Culture & Science | m.e.leegwater@minocw.nl |
| Dra. Gemma Rauret | AQSU de Catalunya | direccio@aqucatalunya.org |
| José Manuel Bayod | ANECA, Professor at the University of Cantabria | bayodjm@unican.es |
| Nick Harris | QAA | n.harris@qaa.ac.uk |
| Dorte Kristoffersen | EVA | dk@eva.dk |
| Mogens Berg | Ministry of Science, Technology and Innovation | n mob@vtu.dk |
| Tue Vinther Jorgensen | EVA | tvj@eva.dk |
| Dr Jim Murray | NQAI | jmurray@nqai.ie |
| Seamus Puirseil | HETAC | spuirseil@hetac.ie |
| Peter Cullen | HETAC | pcullen@hetac.ie |
| Bryan Maguire | DLIADT | Bryan.Maguire@iadt.ie |
| | Mrs. Tone Flood Strom Tim Nordin Prof. Dr. Wolfgang Maennig Prof. Terence Mitchell Dipl. Phys.Wolfgang Koerner Hermann Reuke Dr Rolf Heusser Annick Weizmann Renee Westenbrink Marlies Leegwater Dra. Gemma Rauret José Manuel Bayod Nick Harris Dorte Kristoffersen Mogens Berg Tue Vinther Jorgensen Dr Jim Murray Seamus Puirseil Peter Cullen | Mrs. Tone Flood Strom Ministry Ed & Res Tim Nordin Min Ed & Science Prof. Dr. Wolfgang Maennig FIBAA - Univ. Hamburg Prof. Terence Akkreditierungsrat - Univ Dortmund Dipl. Phys. Wolfgang Koerner Niedersachsischen Min. Wissenschaft und Kultur Hermann Reuke ZEvA Dr Rolf Heusser OAQ Annick Weizmann OAQ Renee Westenbrink VSNU Ministry of Education, Culture & Science Dra. Gemma Rauret AQSU de Catalunya ANECA, Professor at the José Manuel Bayod University of Cantabria Nick Harris QAA Dorte Kristoffersen EVA Ministry of Science, Technology and Innovation Tue Vinther Jorgensen EVA Dr Jim Murray NQAI Seamus Puirseil HETAC Peter Cullen HETAC |

 $[^]i~http://www.joint quality.org/content/ierland/Shared\%20 descriptors\%20 Ba\%20 Ma.doc$

ii http://www.qaa.ac.uk/crntwork/nqf/nqf.htm

iii http://www.scqf.org.uk

iv http://www.nqai.ie

v http://www.vtu.dk/fsk/div/bologna/DanishQFReport.pdf

 $^{\mathrm{vi}}$ UKCGE "The Structure of the Professional Doctorate" in "Professional Doctorates" 2002.